



*Office of Laboratory Licensure,
Certification & Training*

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Jane Dee Hull, Governor
James R. Allen, MD, MPH, Director

DATE: August 27, 1996
TO: Laboratory Director and QA Manager
FROM: Wesley B. Press, Acting Bureau Chief
SUBJECT: Information Update #31
NOTE: If any problems occur with this web site, please call 1-800-952-0374 or (602) 255-3454 extension 205, 221 or 222. Thank You.

1. A one day workshop on GC topics is scheduled for September 27, 1996, 9am - 3pm, in the 9th floor conference room at 3443 North Central Avenue, Phoenix. This workshop will be presented by J & W Scientific. Topics include:
 - a. Care and Maintenance: How to Maximize Capillary Column Life
 - b. Successful Pesticide Analysis: What You Should Know to Reduce Downtime
 - c. Optimizing Parameters Affecting Analysis of Volatile Organic Compounds by Purge and Trap
 - d. Troubleshooting: When is it the (GC) Column's Fault
 - e. Techniques, Tips, and Tricks of Troubleshooting Capillary GC Systems: Common Problems and Their Causes, Troubleshooting Tests

The registration fee is \$20, which includes lunch and parking validation. Please bring your parking stub to us for validation stamp. Seating will be limited to 35 people. To register, call Cristy Finan at (602) 255-3454. Checks should be made payable to ADHS.

2. Results of the MDL survey (distributed in Information Update #27, April 10, 1996) have been compiled. Thank you for the excellent response. Due to the length of the document, we are sending a copy by mail this week to the attention of the laboratory directors and the QA managers of the Arizona licensed labs. If you have any questions regarding the survey, feel free to call us.
3. Technical Resources and Training, as well as all of the Arizona Department of Health Services is now on-line. Our internet address is <http://www.hs.az.us/lab/license/> We will be loading the most recent Information Update on our home page.
4. Following is a list of EPA and Standard Methods procedures for drinking water promulgated as of July 1, 1996. For more comprehensive information and method references, please consult the USEPA "Technical Notes on Drinking Water Methods," EPA/600/R-94/173, October 1994.

METHODS FOR COLIFORM SAMPLING:

Organism	Promulgated/Approved Methods
Total Coliforms	9221A, B, 9222A, B, C, 9221D, 9223, Colisure Test

METHODS FOR INORGANIC CHEMICALS AND OTHER PARAMETERS:

Contaminant	Promulgated/Approved Methods
Antimony	200.8, 200.9, 3113B
Arsenic	200.7, 200.8, 200.9, 3120B, 3113B, 3114B
Asbestos	100.1, 100.2
Barium	200.7, 200.8, 3120B, 3111D, 3113B
Beryllium	200.7, 200.8, 200.9, 3120B, 3113B
Cadmium	200.7, 200.8, 200.9, 3113B
Chromium	200.7, 200.8, 200.9, 3120B, 3113B
Cyanide	335.4, 4500-CN-C, 4500-CN-G, 4500-CN-E, 4500-CN-F
Fluoride	300.0, 4110B, 4500F-B,D, 4500F-C, 4500F-E
Mercury	245.1, 245.2, 200.8, 3112B

Nickel	200.7, 200.8, 200.9, 3120B, 3111B, 3113B
Nitrate	300.0, 353.2, 4110B, 4500-NO3-F, 4500-NO3-D, 4500-NO3-E
Nitrite	300.0, 353.2, 4110-B, 4500-NO3-F, 4500-NO3-E, 4500-NO2-B
Selenium	200.8, 200.9, 3114B, 3113B
Thallium	200.8, 200.9
Lead	200.8, 200.9, 3113B
Copper	200.7, 200.8, 200.9, 3113B, 3111B, 3120B
pH	150.1, 150.2, 4500-H+-B
Conductivity	2510B
Calcium	200.7, 3500-Ca-D, 3111B, 3120B
Alkalinity	2320B
Ortho-phosphate, unfiltered, no digestion or hydrolysis	365.1, 300.0, 4500-P-F, 4500-P-E, 4110
Silica	200.7, 4500-Si-D, 4500-Si-E, 4500-Si-F, 3120B
Temperature	2550
Sodium	200.7, 3111B

METHODS FOR ORGANIC CHEMICALS

Contaminant	Promulgated/Approved Methods
Benzene	502.2, 524.2
Carbon tetrachloride	502.2, 524.2, 551
Chlorobenzene	502.2, 524.2
1,2-Dichlorobenzene	502.2, 524.2
1,4-Dichlorobenzene	502.2, 524.2
1,2-Dichloroethane	502.2, 524.2
cis-Dichloroethylene	502.2, 524.2
trans-Dichloroethylene	502.2, 524.2
Dichloromethane	502.2, 524.2
1,2-Dichloropropane	502.2, 524.2
Ethylbenzene	502.2, 524.2
Styrene	502.2, 524.2
Tetrachloroethylene	502.2, 524.2, 551
1,1,1-Trichloroethane	502.2, 524.2, 551
Trichloroethylene	502.2, 524.2, 551
Toluene	502.2, 524.2
1,2,4-Trichlorobenzene	502.2, 524.2
1,1-Dichloroethylene	502.2, 524.2
1,1,2-Trichloroethane	502.2, 524.2
Vinyl chloride	502.2, 524.2

Xylenes (total)	502.2, 524.2
2,3,7,8-TCDD (dioxin)	1613
2,4-D	515.2, 555, 515.1
2,4,5-TP (Silvex)	515.2, 555, 515.1
Alachlor	505, 507, 525.2, 508.1
Atrazine	505, 507, 525.2, 508.1
Benzo(a)pyrene	525.2, 550, 550.1
Carbofuran	531.1, 6610
Chlordane	505, 508, 525.2, 508.1
Dalapon	552.1, 515.1
Di(2-ethylhexyl)adipate	506, 525.2
Di(2-ethylhexyl)phthalate	506, 525.2
Dibromochloropropane (DBCP)	504.1, 551
Dinoseb	515.2, 555, 515.1
Diquat	549.1
Endothall	548.1
Endrin	505, 508, 525.2, 508.1
Ethylene dibromide (EDB)	504.1, 551
Glyphosate	547, 6651
Heptachlor	505, 508, 525.2, 508.1

Heptachlor Epoxide	505, 508, 525.2, 508.1
Hexachlorobenzene	505, 508, 525.2, 508.1
Hexachlorocyclopentadiene	505, 508, 525.2, 508.1
Lindane	505, 508, 525.2, 508.1
Methoxychlor	505, 508, 525.2, 508.1
Oxamyl	531.1, 6610
PCBs (as decachlorobiphenyl)	508A
(as Aroclors)	505, 508
Pentachlorophenol	515.2, 525.2, 555, 515.1
Picloram	515.2, 555, 515.1
Simazine	505, 507, 525.2, 508.1
Toxaphene	505, 508, 525.2
Total Trihalomethanes	502.2, 524.2, 551

METHODS FOR FILTRATION AND DISINFECTION

1. Microbiological, pH, and Turbidity Methods

Organism	Promulgated/Approved Methods
Total Coliforms	9221A, B, C, 9222A, B, C, 9223

Fecal Coliforms	9221E, 9222D
Heterotrophic bacteria	9215B
Turbidity	2130B, 180.1, Method 2
Temperature	2550

2. Disinfectant Residual Methods

Residual	Promulgated/Approved Methods
Free Chlorine	4500-C1 D, 4500-C1 F, 4500-C1 G, 4500-C1 H
Total Chlorine	4500-C1 D, 4500-C1 E, 4500-C1 F, 4500-C1 G, 4500-C1 I
Chlorine Dioxide	4500-C1O2 C, 4500-C1O2-D, 4500-C1O2-E
Ozone	4500-O3 B

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5. If you have any questions regarding the Updates, or if you have any technical questions that need clarification, please call or send [e-mail](#) to Prabha Acharya, Program Manager, Technical Resources and Training at the Laboratory Licensure. A [table of contents](#) to all the Information Updates published is also available.

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